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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/909,288	07/19/2001	Peter Robert Foley	CM2506	2173

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THE PROCTER & GAMBLE COMPANY
INTELLECTUAL PROPERTY DIVISION - WEST BLDG.
WINTON HILL BUSINESS CENTER - BOX 412
6250 CENTER HILL AVENUE
CINCINNATI, OH 45224

EXAMINER

DELCOTTO, GREGORY R

ART UNIT	PAPER NUMBER
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1751

MAIL DATE	DELIVERY MODE
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05/03/2007

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

09/909,288

Applicant(s)

FOLEY ET AL.

Examiner

Gregory R. Del Cotto

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 20 February 2007.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 57, 58 and 63 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 57, 58 and 63 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____

DETAILED ACTION

1. Claims 30-35, 57, 58, and 63 are pending. Claims 30-35 have been withdrawn from consideration as being drawn to a non-elected invention. Claims 1-29 and 59-62 have been canceled. Note that, Applicants arguments and amendments filed 2/20/07 have been entered.

Objections/Rejections Withdrawn

The following objections/rejections as set forth in the Office action mailed 8/18/06 have been withdrawn:

The rejection of claims 57, 58, and 63 under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention has been withdrawn.

Priority

Receipt is acknowledged of papers submitted under 35 U.S.C. 119(a)-(d), which papers have been placed of record in the file.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for a patent.

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

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(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

The changes made to 35 U.S.C. 102(e) by the American Inventors Protection Act of 1999 (AIPA) and the Intellectual Property and High Technology Technical Amendments Act of 2002 do not apply when the reference is a U.S. patent resulting directly or indirectly from an international application filed before November 29, 2000. Therefore, the prior art date of the reference is determined under 35 U.S.C. 102(e) prior to the amendment by the AIPA (pre-AIPA 35 U.S.C. 102(e)).

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148. USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

Claims 57 and 58 are rejected under 35 U.S.C. 103(a) as obvious over JP 60-141,800 in view Culshaw et al (US 5,202,050), JP 8151597, Weibel et al (US 5,821,214), and Trinh et al (US 6,194,362).

'800 teaches a liquid detergent composition containing 0.1 to 10% by weight of a swellable clay mineral, 0.1 to 30% of a solvent, 1 to 20% of a surfactant and 0.5 to 30% of an alkali agent. Suitable solvents include diethylene glycol monobutyl ether, etc. See page 4, lines 10-50. Note that, amine oxide surfactants and monoethanolamine may also be used in the compositions. See page 9, lines 1-30. Suitable additional

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ingredients include fragrances, dyes, etc. See page 6, lines 1-15. These compositions are used for removing soils from ovens, glass, refrigerators, and other kitchen items. See page 3, lines 1-10. The product of the invention may be used as-is, and an aerosol or spray-type product is also appropriate from the standpoint of ease of use. See page 6, lines 1-10.

'800 does not specifically teach a synthetic laponite clay having a particle size of less than 100 nm, xanthan gum, and an odor masking perfume comprising an ionone nor a cleaning composition having the specific physical parameters containing a solvent, a synthetic laponite clay with a particle size of less than 100 nm, xanthan gum, and odor masking perfume comprising an ionone, and the other requisite components of the composition in the specific proportions as recited by the instant claims.

Culshaw et al teach safe and effective hard-surface cleaning compositions which contain a binary mixture of an organic solvent and a narrowly defined chelating agent. See Abstract. Suitable organic solvents include benzyl alcohol, 2-(2-butoxyethoxy)ethanol, 1-(2-n-butoxy-1-methylethoxy)propane-2-ol, etc., and can be used in amounts of from 1% to 20%. See column 5, lines 1-30. In addition to the essential chelating agent/solvent binary mixture, the compositions can contain additional ingredients such as surfactants and suitable surfactants include anionic, nonionic, cationic, amphoteric, and zwitterionic surfactants. See column 5, lines 45-69. Also, thickeners may be used in the compositions in amounts from 0.2% to 1.5% and include xanthan gums, smectite clays, etc. See column 6, lines 55-69. Highly desirable ingredients for use include hydrotropes such as monoethanolamine, diethanolamine,

triethanolamine, etc. See column 6, lines 15-35. The pH of such compositions will generally be in the range of from 5 to 11. See column 7, lines 50-60.

'597 teaches liquid detergent compositions containing a clay mineral having an average particle size of 10 to 5000 nm and anionic and nonionic surfactants. These minerals include montmorillonite, saponite, smectite and swelling mica. See Abstract.

Weibel teaches a hard surface scouring cleaner composition comprising from 0.5 to 10% of soft abrasive articles, from 0.5 to 2.5% of a chlorine-containing bleach, from 0.2 to 3% of a thickening system comprising from 0.2 to 3% based on the weight of the composition of a cross-linked polyacrylate resin and from 0 to 2.5% of a synthetic smectite clay, from 0.25 to 3% of a bleach stable surfactant system, from 0 to 3% of an electrolyte, and a sufficient amount of sodium or potassium hydroxide to provide a pH in the range of 11.5 to 13.5. See Abstract. The preferred synthetic smectite clays are sold under the trademark Laponite and particularly useful are Laponite RD and Laponite RDS. Note that, these are the same as the laponite materials listed as the gel forming and sol forming materials on page 13, lines 10-35 of the instant specification and the Examiner asserts that these Laponite clay materials as taught by Weibel would have the same layer structure as recited by the instant claims. The addition of the synthetic clay provides improved stability, particularly over long time periods. See column 5, lines 30-55.

It would have been obvious to one of ordinary skill in the art, at the time the invention was made, to use a synthetic laponite clay in the composition taught by '800, with a reasonable expectation of success, because Weibel et al teach the that the use

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of a synthetic laponite clay thickener in a similar cleaning composition which provides improved stability the composition, particularly over long time periods, and further, '800 teaches the use of smectite clays in general.

It would have been obvious to one of ordinary skill in the art, at the time the invention was made, to use a synthetic laponite clay having a particle size of less than 100 nm in the cleaning composition taught by '800, with a reasonable expectation of success, because '597 teaches the use of smectite clay having a particle size of less than 100 nm in a similar detergent composition and '800 in combination with Weibel et al teach a composition containing synthetic laponite clays.

It would have been obvious to one of ordinary skill in the art, at the time the invention was made, to use xanthan gum in the cleaning composition taught by '800, with a reasonable expectation of success, because Culshaw et al teach the equivalence of smectite clays to xanthan gum in a similar cleaning composition and further, '800 teaches the use of thickening agents such as swellable clay minerals including smectite-type clay minerals.

Trinh et al teach liquid aqueous, hard surface detergent compositions having improved cleaning and good filming/streaking characteristics comprising from about 0.0015 to about 3% of a blooming perfume composition comprising at least about 50% of blooming perfume ingredients selected from the group consisting of perfume ingredients having a boiling point of less than about 260 degrees Celsius; from about 0.001% to about 2% of a detergent surfactant; from about 0.5% to about 30% of a hydrophobic solvent, and the balance being an aqueous solvent system comprising

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water and a solvent such as methanol, ethanol, isopropanol, ethylene glycol, propylene glycol, glycol ethers, etc. See column 1, line 55 to column 2, line 30. Suitable perfumes include blooming perfume ingredients and extensive mixtures of perfumes, including ionone, which encompass the blooming perfumes and ionones as recited by the instant claims. See column 6, line 10 to column 10, line 1.

Suitable glycol ethers include monopropylene glycol monopropyl ether, diethyleneglycolmonoethyl ether, monoethyleneglycol monobutyl ether, etc. See column 14, lines 54-65.

It would have been obvious to one of ordinary skill in the art, at the time the invention was made, to use a perfume comprising an ionone as recited by the instant claims in the composition as taught by '800, with a reasonable expectation of success, because Trinh et al teach a similar hard surface cleaning composition containing a perfume comprising an ionone further '800 teach the use of optional components including perfumes.

With respect to the flow viscosity, shear thinning properties, pH, and other physical parameters as recited by the instant claims, the Examiner asserts that the broad teachings of '800 in combination with Culshaw et al, Weibel et al, Trinh et al, and '597 would encompass compositions having the same the flow viscosity, shear thinning properties, pH, and other physical parameters as recited by the instant claims because '800 in combination with Culshaw et al, Weibel et al, Trinh et al, and '597 suggest compositions containing the same components in the same proportions as recited by the instant claims.

It would have been obvious to one of ordinary skill in the art, at the time the invention was made, to formulate a detergent composition used in a spray dispenser having the specific physical parameters containing a solvent, a synthetic laponite clay having a particle size of less than 100 nm, a xanthan gum, perfume comprising an ionone, and the other requisite components of the composition in the specific amounts as recited by the instant claims, with a reasonable expectation of success and similar results with respect to other disclosed components, because the broad teachings of '800 in combination with Culshaw et al, Trinh et al, '597, and Weibel et al suggest a detergent composition used in a spray dispenser having the specific physical parameters containing a soil swelling agent, a synthetic laponite clay having a particle size of less than 100 nm, xanthan gum, perfume comprising an ionone, and the other requisite components of the composition in the specific amounts as recited by the instant claims.

Claims 57 and 58 are rejected under 35 U.S.C. 103(a) as being unpatentable over JP 60-141,800 in view Culshaw et al (US 5,202,050), JP 8151597, Weibel et al (US 5,821,214), and Trinh et al (US 6,194,362) as applied to claims 57 and 58 above, and further in view of WO99/24539.

'800, Culshaw et al, Weibel et al, JP 8151597, and Weibel et al are relied upon as set forth above. However, none of the references teach the use of propylene glycol butyl ether in addition to the other requisite components of the composition as recited by instant claim 63.

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'539 teaches a method of softening soil deposited on a hard surface. The method comprises contacting a hard surface having soil with a composition having a soil softening additive incorporated into the composition. The compositions may be formulated at either high or low pH and preferred soil softening additives are amylase enzymes. See Abstract. The hard surface may be plates, glasses, cutlery, pots, pans and other surfaces such as kitchen countertops, sinks. Metal surfaces, tiles, bathtubs, floors, etc. See page 3, lines 1-10. The compositions may include one or more buffering agents such as monoethanolamine, diethanolamine, triethanolamine, etc., and the buffering agent may be present from 0.1 to 15% by weight of the composition. See page 14, line 15 to page 15, line 25. Solvents may also be used in the compositions and include ethanol, propanol, benzyl alcohol, propylene glycol butyl ether, diethylene glycol monobutyl ether, etc. See page 18, line 5 to page 22, line 30.

It would have been obvious to one of ordinary skill in the art, at the time the invention was made, to use propylene glycol butyl ether in the composition taught by '800, with a reasonable expectation of success, because '539 teaches the equivalence of propylene glycol butyl ether to diethylene glycol monobutyl ether in a similar cleaning composition and further, '800 teaches the use of diethylene glycol monobutyl ether.

Response to Arguments

With respect to the rejection instant claims 57 and 58 under 35 USC 103 using JP 60-141800 in view of Culshaw et al, JP 8151597, Weibel et al, and Trinh et al and rejection of claim 63 under 35 USC 103 using JP 60-141800 in view of Culshaw et al, JP 8151597, Weibel et al, and Trinh et al, and further in view of WO 99/24539,

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Applicant states that the Examiner's reliance upon many of the secondary references as "similar" and their teaching of the equivalence of one component to another is flawed. Further, Applicant states that an expectation of equivalence is not merely created by a recitation in a Markush group and more discussion or "teaching" in the reference must be present for the equivalency rationale to hold water. In response, note that, the Examiner asserts that the secondary references relied upon are similar hard surface cleaners and drawn to the same field of endeavor as the primary reference, JP 60-141800. Furthermore, the Examiner asserts that since these references are all drawn to the same field of endeavor and are analogous prior art, one of ordinary skill in the art would look to the secondary references to cure the deficiencies of the primary reference, JP 60-141800, with a reasonable expectation of success.

With respect to Applicant's assertion that the recitation in a Markush group does not create an equivalence conclusion of one component to another, the Examiner asserts that in the cleaning and detergent field, the listing of several components in a Markush group useful in the composition as thickeners or solvents, for example, does create a presumption that these materials are equivalent thickening or solvent materials. Further, the Examiner asserts that one of ordinary skill in the art looking at such a reference would recognize that these materials are equivalents for their disclosed intended use within such a composition; it is not necessary that the prior specifically state that these materials are equivalents and the Examiner asserts that the equivalency is implicit since the materials are all listed together as surfactants, solvents, thickeners, builders, etc. Note that, an express suggestion to substitute one equivalent

component or process for another is not necessary to render such substitution obvious.

In re Fout, 675 F.2d 297, 213 USPQ 532 (CCPA 1982). See MPEP 2144.06.

Additionally, Applicant asserts that the combinations of references set forth in the above rejections is a matter of impermissible hindsight. Additionally, with respect to the flow viscosity, shear thinning properties, and pH, Applicant states that these properties are not disclosed by the primary reference, JP 60-141800. In response to applicant's argument that the examiner's conclusion of obviousness is based upon improper hindsight reasoning, it must be recognized that any judgment on obviousness is in a sense necessarily a reconstruction based upon hindsight reasoning. But so long as it takes into account only knowledge which was within the level of ordinary skill at the time the claimed invention was made, and does not include knowledge gleaned only from the applicant's disclosure, such a reconstruction is proper. See *In re McLaughlin*, 443 F.2d 1392, 170 USPQ 209 (CCPA 1971). Further, the Examiner maintains that, as stated above, with respect to the flow viscosity, shear thinning properties, pH, and other physical parameters as recited by the instant claims, the Examiner asserts that the broad teachings of '800 in combination with Culshaw et al, Weibel et al, Trinh et al, and '597 would encompass compositions having the same the flow viscosity, shear thinning properties, pH, and other physical parameters as recited by the instant claims because '800 in combination with Culshaw et al, Weibel et al, Trinh et al, and '597 suggest compositions containing the same components in the same proportions as recited by the instant claims. Note that, '800 is drawn to the same type of cleaner having the same intended use as recited by the instant claims and Applicant has provided no data

or evidence showing that at least '800 has a pH, viscosity, etc., which is different from the composition as recited by the instant claims. Further, Applicant states that the combination of references do not teach or suggest the spray droplet size system as recited by the instant claims. In response, note that, the Examiner maintains that '800 teaches aerosol or spray-type products and would encompass droplets having the same size as recited by the instant claims since these droplet sizes are conventional and well-known to those skilled in the art.

Conclusion

THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).


A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Gregory R. Del Cotto whose telephone number is (571) 272-1312. The examiner can normally be reached on Mon. thru Fri. from 8:30 AM to 6:00 PM.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Douglas McGinty can be reached on (571) 272-1029. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).


Gregory R. Del Cotto
Primary Examiner
Art Unit 1751

GRD
April 29, 2007